

## **FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-8094**

### **Consolidated Disposal Service**

**9524 Road 7 NE**

**Moses Lake, WA 98837**

### **SUMMARY**

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 8094. The Department of Ecology (the Department) is proposing to issue this permit, which will allow a zero discharge operation. This fact sheet explains the nature of the above company's wastewater system and its operation, and the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

In 2004, Consolidated Disposal Service Company built a solid waste (municipal garbage for the city of Moses Lake) transfer station at the edge of the town. The facility will also washes their trucks daily; therefore the wash water should be collected, treated, and disposed of properly. A wastewater discharge permit is required to operate this function.

Due to the reason that there is no city sewer hookups at the location of the facility, the company decided to built an on site evaporation pond to retain and disposal of the wash water. The pond is double lined with leak detection. This will result in limited wastewater monitoring during this permit cycle. However, the facility should focus their effort to routine O & M (operation and maintenance), regular leak detection inspection, and removal of the sand and dirt from the collection chamber etc.

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## **FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-**

**Consolidated Disposal Service**  
**9524 Road 7 NE,**  
**Moses Lake, WA 98837**

### **INTRODUCTION**

Washington State law (RCW 90.48.080 and 90.48.162) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. Regulations adopted by the state include procedures for issuing permits (Chapter 173-216 WAC), and water quality criteria for ground waters (Chapter 173-200 WAC). They also establish requirements which are to be included in the permit.

This fact sheet and draft permit are available for review by interested persons as described in Appendix A--Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D--Response to Comments.

<b>GENERAL INFORMATION</b>	
Applicant	Consolidated Disposal Service
Facility Address	9524 Road 7 NE, Moses Lake, WA 98837
Type of Facility	Solid Waste Transfer with Truck Washing
Type of Treatment:	None-Discharge Storage and Evaporation Pond
Discharge Location	Latitude: 47° 11' 22.7" N                      Longitude: 119° 15' 41" W.
Contact at Facility	Name: Mike Dietrich, Telephone #: (509) 754-2468
Responsible Official	Name: Mike Dietrich Title : Vice President Address: P.O. Box, 2370 Basin St. SW, Ephrata, WA 98823 Telephone : (509) 754-2468 Fax : (206) 754-3173

## **BACKGROUND INFORMATION**

### *DESCRIPTION OF THE FACILITY*

Consolidated Disposal Service is a family owned, garbage collection, and transfer for disposal solid waste management company. The company is located at Ephrata (Figure 1, location map), but service area includes the City of Moses Lake.

In order to save transportation cost, the company built this garbage transfer station at the edge of the City of Moses Lake. The City's garbage will be transported here by trucks, unloaded to the transfer station, repackaged to big trailers, and transport it by trailer trucks to Ephrata for landfill. By doing so, the company will only need three trailers per day to Ephrata vs. numerous trucks transporting the same. This will save significant transportation cost for the business.

### **INDUSTRIAL PROCESSES**

The garbage trucks will collect garbage from homes around the City of Moses Lake area. The trucks will bring the garbage to the transfer station for repackaging. The garbage is unloaded into a large building where the floor is sloped; a bulldozer pushes the garbage to a chamber where the garbage will be packed to trailers; then the garbage will be transported by trailers to Ephrata for landfill. Currently, the company will only pack three trailers per day. In the future, the number of packed trailers might increase if the company receives more business from the City of Moses Lake.

### **TREATMENT PROCESSES**

After transporting garbage, the trailer trucks need to be washed daily. The washing facility is located next to the transfer station. It is a drive through type of facility. Currently, only three trailers will be washed daily. The washing is done by a high pressure hose and operated manually. The estimated flow is 300 gallons per day. The wash water will be collected through a floor drain in the washing room.

The collected wash waters will pass through a 1600 gallon sand trap first, located just outside the wash building, then the filtered water will flow to a concrete chamber, a three cell 4000 gallon oil/water separator. In the first chamber, the oil and water are separated by gravity, with the top layer of oil and grease flowing to the second cell through an upper pipe, and the bottom layer of water flows to the third chamber through the bottom pipe. The water then flows to a lined evaporation pond. The pond is lined using 30mil HDPE double liner with leak detection.

Adjacent to the washing building is fueling station. There is one floor drain on each side of the fueling pump. The storm water run off or floor rinse waters from the fueling station is also flow to the collection chamber. The estimated flow is 200 gallons per day.

The facility's sanitary sewer goes to an on site septic tank/drain field. The facility has its own well to provide all water usage.

### *PERMIT STATUS*

This is a new permit. The permit application was submitted to the Department on April 7, 2004, and accepted by the Department on May 21, 2004.

### *WASTEWATER CHARACTERIZATION*

This facility is newly built and not yet in operation. Therefore there is no previous testing data or wastewater sample data. In the application, the facility referenced similar truck washing operation in Pasco where the data was collected and analyzed, a copy of which is attached to the fact sheet as a reference. It is decided to test for Fecal Coliform and Total Dissolved Solids (TDS) of the wastewater to monitor qualities of the pond water.

### **PROPOSED PERMIT LIMITATIONS**

State regulations require that limitations set forth in a waste discharge permit must be either technology- or water quality-based. Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not pollute the waters of the State.

The facility has achieved AKART by constructing a pretreatment system and a double lined with leak detection evaporation pond system as the final wastewater disposal. The pond system appears to have enough capacity to store all wastewater year around.

Based on the fact that there will be no anticipated discharge from the evaporation pond, it is concluded that discharge limitations will not be necessary to impose on to this facility except flow. The flow limit is within the limit that the facility had applied for in the permit application, and for which the permit fee is based upon. The flow limit will be 500 gpd (gallons per day).

### **MONITORING REQUIREMENTS**

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, that ground water criteria are not violated, and that effluent limitations are being achieved (WAC 173-216-110).

### *WASTEWATER MONITORING*

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, significance of pollutants, and cost of monitoring.

The waste water monitoring should include flow. This is to insure that the actual total flow is within the design criteria so that there will be no overflow from the pond. Other parameters include Fecal Coliform for human health concerns, TDS (total dissolved solids) in case a leak occurs in the pond liner, and leak detection for monitoring the integrity of the pond liner. The detailed monitoring schedule is as following:

**Table 1. Wastewater Monitoring**

<b>Parameter</b>	<b>Sample Point</b>	<b>Frequency</b>	<b>Sample Type</b>
Flow (gpd)	Pump house	daily	meter
Fecal Coliform(col/100ml)	The pond	1/quarter	grab
TDS (mg/l)	The pond	1/quarter	grab
Leak inspection	Leak detection	1/quarter	visual

## **OTHER PERMIT CONDITIONS**

### *REPORTING AND RECORDKEEPING*

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 273-216-110).

### *OPERATIONS AND MAINTENANCE*

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

The submission of O & M Manual is due six months after the start operation of the pond system or six months after this permit is issued.

### *NON-ROUTINE AND UNANTICIPATED DISCHARGES*

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for non-routine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall or through a stormwater outfall for clean water, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

### *SPILL PLAN*

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to

require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The Spill Plan can be included in the O & M Manual in a independent section.

### *GENERAL CONDITIONS*

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to ground water permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the payment of permit fees. Condition G10 describes the penalties for violating permit conditions.

### **RECOMMENDATION FOR PERMIT ISSUANCE**

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, and to protect human health and the beneficial uses of waters of the State of Washington. The Department proposes that the permit be issued for 5 years.

### **REFERENCES FOR TEXT AND APPENDICES**

Washington State Department of Ecology, 1993. Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems, Ecology Publication # 93-36. 20 pp.

Washington State Department of Ecology, 1996. Implementation Guidance for the Ground Water Quality Standards, Ecology Publication # 96-02.

### **APPENDICES**

#### *APPENDIX A--PUBLIC INVOLVEMENT INFORMATION*

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

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Public notice of application was published on June 25 and July 2, 2004 in the Columbia Basin Herald to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

This permit was written by Ying Fu.



*APPENDIX B--GLOSSARY*

**Ammonia**--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

**Average Monthly Discharge Limitation**--The average of the measured values obtained over a calendar month's time.

**Best Management Practices (BMPs)**--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

**Compliance Inspection - Without Sampling**--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

**Compliance Inspection - With Sampling**--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

**Composite Sample**--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

**Construction Activity**--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

**Continuous Monitoring** --Uninterrupted, unless otherwise noted in the permit.

**Engineering Report**--A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

**Grab Sample**--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

**Industrial Wastewater**--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of

industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

**Maximum Daily Discharge Limitation**--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

**Method Detection Level (MDL)**--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

**pH**--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

**Quantitation Level (QL)**-- A calculated value five times the MDL (method detection level).

**Soil Scientist**--An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3,or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

**State Waters**--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

**Stormwater**--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

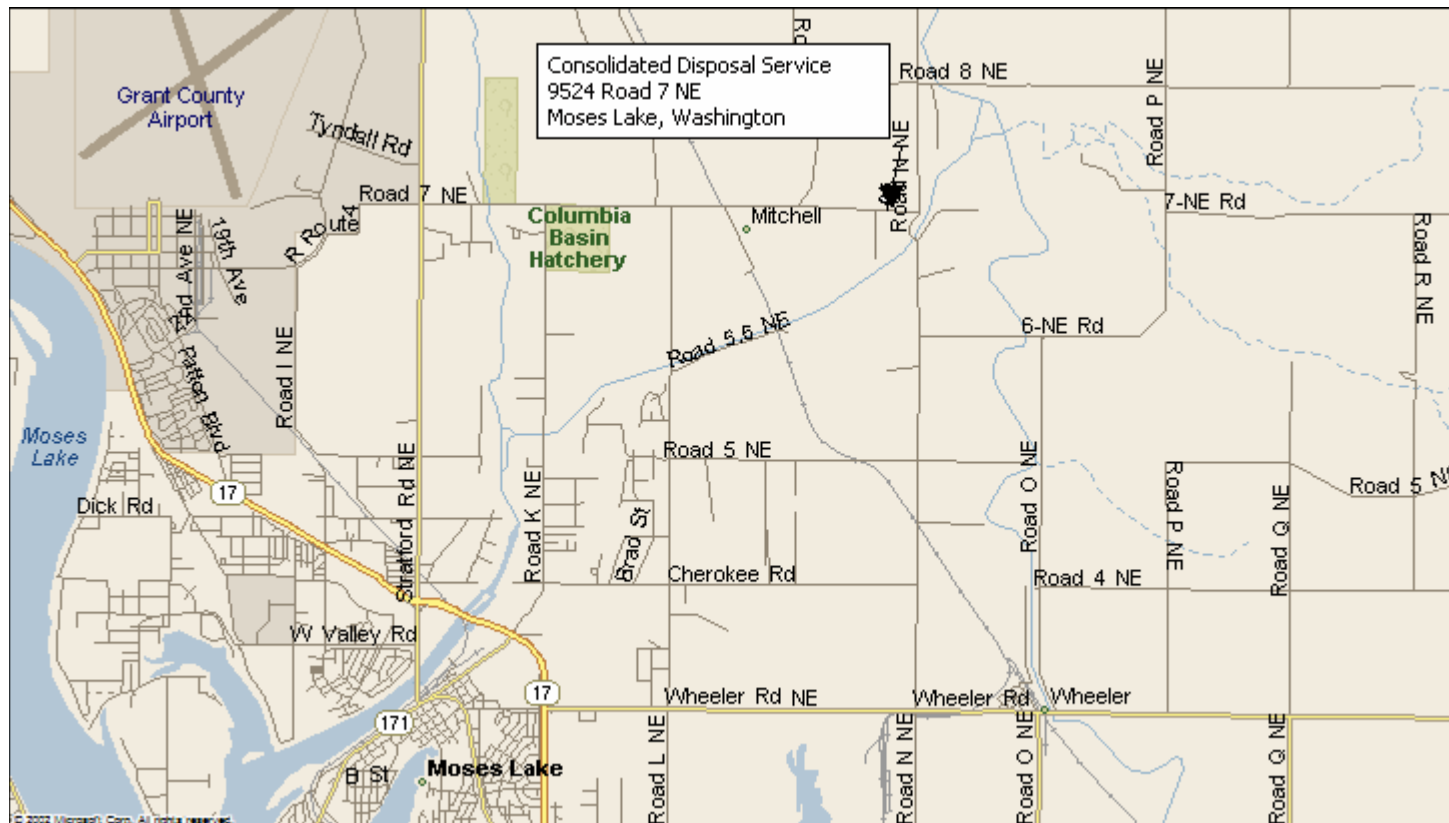
**Technology-based Effluent Limit**--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

**Total Dissolved Solids**--That portion of total solids in water or wastewater that passes through a specific filter.

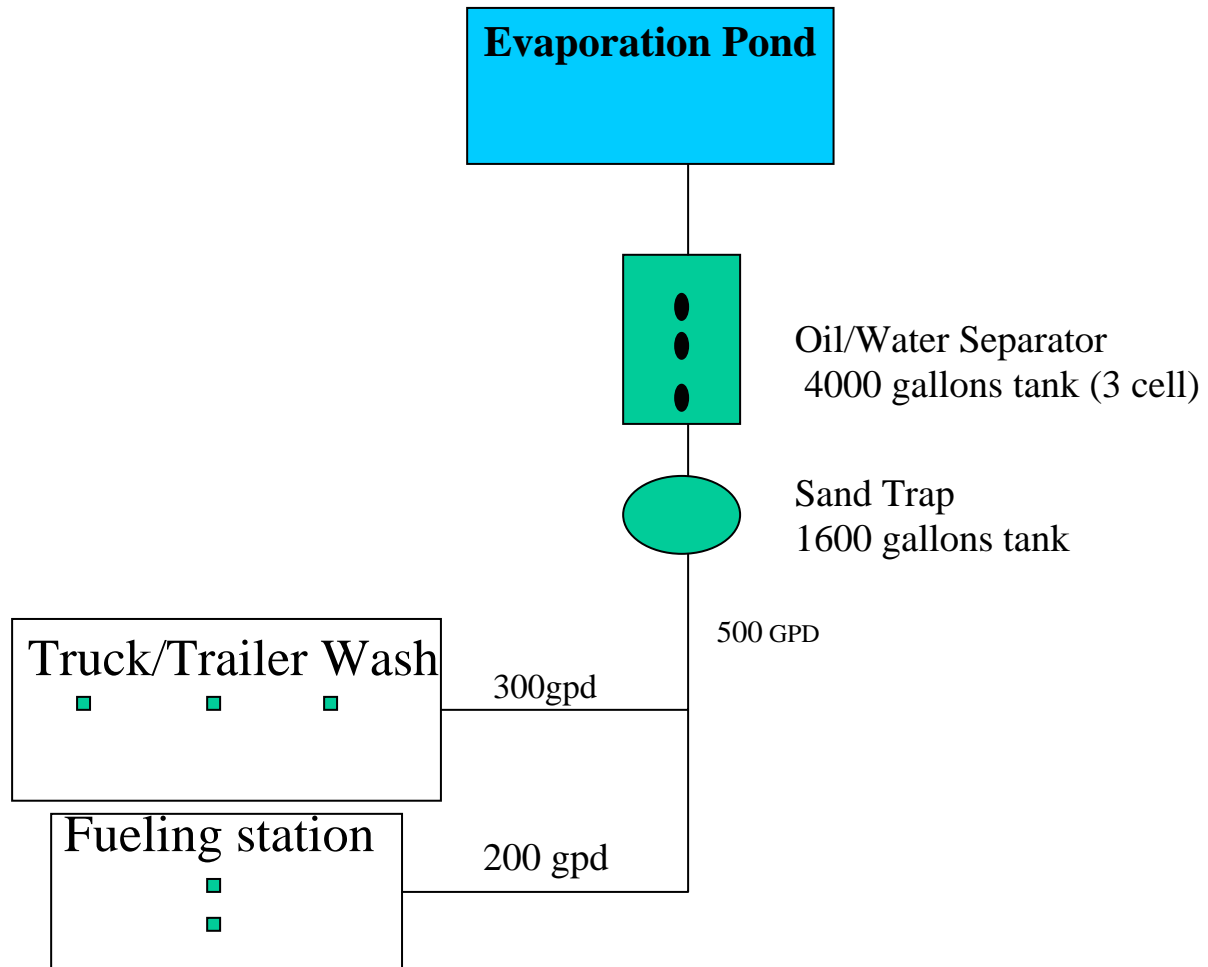
**Total Suspended Solids (TSS)**--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

**Water Quality-based Effluent Limit**--A limit on the concentration of an effluent parameter that is intended to prevent pollution of the receiving water.

### Figure 1 Location Map



**Figure 2 Process Water Flow Schematic**



*APPENDIX C – RESPONSE TO COMMENTS*